

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Timothy J. Brennan  
Application No.: 10/640,986  
Filed: 8/14/2003  
Title: METHOD AND FUEL  
ADDITIVE INCLUDING IRON  
NAPHTHENATE  
Attorney Docket No.: EP-7606

Group Art Unit: 1714  
Examiner: Cephia D. Toomer

Commissioner of Patents  
MAIL STOP AMENDMENT  
P.O. Box 1450  
Alexandria, Virginia 22313

RESPONSE

Dear Sir:

Applicant submits this Response to the Office Action mailed February 8, 2007. Attached is a Supplemental Declaration of Timothy J. Brennan in support of patentability of the present invention.

At present, claims 1 and 5-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over FR 2181607. Claims 8-11 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over FR '07 in view of WO '362, SOLVESSO 150 and www.oilchem.com. Finally, claims 1-4 and 6-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over WO '193. For any one or more of the following reasons, and further in view of the Supplemental Declaration of Timothy J. Brennan attached, Applicant submits

that the claims are in condition for allowance.

Turning first to the rejection of claims 1 and 5-7 as being unpatentable over FR '607, Applicant submits that the underlying assumptions that are necessary to justify the rejection are not reasonably supported. The Office Action concedes that FR '607 does not disclose the cloud point and viscosity limitations that are a part of the claimed invention. This failure of disclosure is overcome in the Office Action by the statement that it would be "reasonable to expect" that FR '607 would meet these limitations. This assumption is necessary to justify the entire rejection based on the FR '607 reference.

Applicant submits that the assumptions with respect to the FR '607 are not reasonably supported. As set forth in the supplemental Brennan declaration, the earlier testing that led to the development of the present invention specifically tested a range of hydrocarbon solvents to seek to meet the viscosity and cloud point requirements that were defined by the commercial specifications. As indicated, multiple hydrocarbon solvents failed (did not meet) the claimed viscosity requirements. Further, an additional hydrocarbon solvent failed the claimed cloud point specification. Because many "hydrocarbon" solvents (the FR '607 disclosure) do not meet the claimed limitations, it is not "reasonable to expect" that the disclosure of FR '607 would meet the claim limitations with respect to cloud point and viscosity. Additionally, specifically with respect to claim 6 (aromatic solvent), the Supplemental Declaration of Brennan indicates that it is not reasonable to

simply assume that a teaching of hydrocarbon solvents generally would suggest that an appropriate solvent would be an aromatic solvent. While aromatic solvents are a subset of hydrocarbon solvents, a disclosure of hydrocarbon solvents does not suggest to one of skill in the art that the solvent is necessarily or appropriately an aromatic solvent.

In view of the foregoing evidence with respect to the claim limitations of cloud point and viscosity, Applicant submits that the fundamental assumptions in the Office Action rejection are not reasonably justified. Applicant submits that the rejections based on the FR '607 reference are traversed.

Turning now to the rejection of claims 1-4 and 6-8 as being unpatentable over WO '193, Applicant restates and reemphasizes the foregoing arguments with respect to the claim limitations of cloud point and viscosity generally. The bottom line is that these limitations are not reasonably expected from hydrocarbon solvents generally or from the hydrocarbon solvents taught in WO '193. The cloud point and viscosity of a mixture of anthracene oil and iron napthenate are not predictable. Therefore, it is not reasonable to expect that WO '193 teaches the claimed invention.

In view of the foregoing evidence in rebuttal to the assumptions of the Office Action, Applicant submits that the rejections based on the WO' 193 reference are traversed.

Finally, with respect to the rejection of claims 8-11 and 13 in view of the combination cited in the Office Action, Applicant submits that these rejections are traversed for at least the same reasons that the rejections of claims 1 and 5-7 were traversed in view of the FR 607 reference. Still further, however, as noted in the supplemental Brennan declaration, although SOLVESSO 150 and SHELLSOL AB may be similar in some physical respects, they are not interchangeably identical. For instance, another "150" solvent by ExxonMobil (Aromatic 150) failed the cloud point test and does not meet the cloud point claim limitations. It is not reasonable to expect that the SOLVESSO 150 solvent would or could meet the performance requirements of the claims with respect to viscosity and cloud point. In view of this evidence, Applicant submits that the rejection of these claims is likewise traversed.

For any one or more of the foregoing reasons, and further in view of the Supplemental Brennan Declaration, Applicant submits that all of the claims of the present application are in condition for allowance. Favorable action is requested hereon.